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APPLICATION FOR UNITED STATES LETTERS PATENT

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TITLE: FREEZE AND HEAT FOOD PROPORTIONING BAG

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FREEZE AND HEAT FOOD PREPORTIONING BAG

BACKGROUND OF THE INVENTION

This invention relates to food preportioning bags of the type used in food handling facilities such as restaurants and, in particular, to a food preportioning bag that, when filled, may be frozen and heated.

In a typical situation, restaurants or the like receive food such as vegetables, shrimp or chicken in bulk form. In off-peak hours, employees divide the food into individual portions so that when the restaurant is busy, there will be no time wasted preparing such portions.

It has become a common practice to store the individual portions in separate plastic bags to preserve freshness and for ease of handling. Since it was recognized that the preparation of the bulk food and the preportioning thereof might occur on a different day through the use thereof, a system needed to be developed which would insure that the oldest product in storage was used first. Since it was seldom, if ever, desirable to use such food more than one week after storage, such systems evolved into simply indicating the day on which the portioning took place or by which the food must be used. "Tuesday" food in storage would then be used before "Wednesday" food, etc.

Marking pens could be utilized to write the day on the bags but this method is unreliable due to erasure or smudging, and the method is also time consuming. Adhesive labels, each having a separate day printed thereon, became a more acceptable practice. Such labels were also color coded so that workers would be able to recognize a "Wednesday" label by its red color; a "Thursday" label by its brown color, etc. This facilitated selection of the correct day label from

the inventory of labels for application to the bags of preportioned food, and it also facilitated selection of the bags from storage on or before the "use by" day.

The application of the adhesive labels still added time to the preportioning operation which is a problem recognized in U.S. Patent No. 5,642,605 to Tenner et al. The plastic bags disclosed therein each have a separate day of the week printed thereon, the printing preferably being in the same separate colors that were used on the adhesive labels. With these bags, it was only necessary to select from the inventory of bags those marked with the day that the preportioning is taking place or the "use by" day. This eliminated the time needed for applying a label to each bag.

The bagged individual food portions are often frozen during storage and must be heated prior to use. As a result, the use of preportioning bags is made even more convenient if the food preportioning bags may be frozen and heated in a microwave and/or steamed. Such a bag would streamline the process of preparing the food in the bag for serving or other use in that the bag could simply be removed from freezer storage and heated without removing the food from the bag. The prior art has failed to disclose a food preportioning bag that provides such freezer to microwave or steamer to plate capability.

SUMMARY OF THE INVENTION

This invention relates to food preportioning bags which enable still further efficiencies in the portioning, storage and preparation of food initially in bulk form. In accordance with the invention, at least seven sets of bags are provided. The bags are printed with day identification indicia in multiple languages. In addition, the bags are color-coded to reflect the day imprinted on the bags. As a result, the bags may be easily identified for use. A set of clear bags is also

provided and each bag of the set features a blank instead of day identification indicia so that specific dates may be marked on the bags.

The bags are constructed from a material that will withstand freezing, microwave heating and steaming. The bags also are provided with vents. As a result, the food within the bags may be frozen and heated without removal from the bags. The bags may be mounted on a "saddle" for ease of use.

For a more complete understanding of the nature and scope of the invention, reference may now be had to the following detailed description of embodiments thereof taken in conjunction with the appended claims and accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is perspective view of an embodiment of the bags of the invention shown in assembled relationship on a saddle structure;

Figure 2 is a plan view of the front of one of the bags of Figure 1; and

Figure 3 is a plan view of the back of the bag of Figure 2.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The drawings illustrate a preportioning bag 10 having a main body portion 12 with closed side edges 14 and a closed bottom edge 16. With reference to Fig. 2, a front overlay 18 may be folded along the edge 20 into overlying relationship with the front wall 21 of the main body portion and secured at its sides 22 by heat sealing to the main body portion. The back wall of the main body portion, illustrated at 23 in Fig. 3, includes an extension 24 which may be tucked

within the bag after filling. The free edge 26 of the overlay 18 is then pulled over the open top of the bag to form a closure. It is to be understood, however, that the bag 10 could use a different sealing method. For example, the bag could use a zipper type locking seal located near the tops of the front wall 21 and back wall 23.

Proportioning bag 10 is constructed of a plastic material that will withstand freezing, microwave heating and steaming. High Molecular Weight-High Density Polyethylene is the preferred material. In addition, as indicated at 28, the front wall 21 and rear wall 23 of the bag are provided with vents 28. These vents preferably consist of multiple semi-circular slits cut into the front and rear walls of the bag. While semi-circular slits are illustrated, the shape and number of the slits may vary. The vents permit vapor to escape the bag during heating so that the pressure within the bag does not rise to an excessive level. As a result, the proportioning bags of the invention may be used to store and prepare food so that it is travels in the bags directly from the freezer to the microwave or steamer to the plate or other use.

As illustrated in Figs. 1 and 2, the bags of this invention have the text "Use by End of Day XXXX" printed thereon, where XXXX is one of the seven days of the week, as shown at 30. Separate printed blocks 32 are provided for the text in foreign languages such as French, Spanish and Haitian Creole. While the set of bags illustrated in Figs. 1 and 2 indicate "Sunday" as the day of the week, at least six other sets of bags are preferably provided for a total of seven sets of bags. As a result, each day of the week has a dedicated set of bags that are marked with that day's name, and the accompanying text, in English, French, Spanish and Haitian Creole. It is to be understood that additional or alternative foreign languages may be provided on each bag. In addition, identification indicia other than a day of the week may be preprinted on the bags.

The bags of a set are all of one color. The bag sets are preferably color-coded to the seven days of the week with the selected colors following conventional practice as follows:

Sunday -	Black
Monday -	Blue
Tuesday -	Yellow
Wednesday -	Red
Thursday -	Brown
Friday -	Green
Saturday -	Orange

In addition, a clear set of bags may be provided (for a total of eight sets of bags) with blanks where the day of the week appears in Figs. 1 and 2 so that a specific date, as opposed to a day of the week, may be marked on the bag with a marker.

In one form of the practice of the invention, a set of bags are manufactured in the form shown in Figure 1. Specifically, the extension 24 of each bag is attached along a perforated line 38 to a central plastic strip 40. A pair of heat welds 41a and 41b, that are formed using standard heat welding techniques known in the industry, secure the set of bags together via the strip 40. In addition, the strip 40 defines openings 42 which receive pegs 44 of saddle structure 46. As illustrated, a bag 10 is releasably attached to each side edge of the strip 40 so that the bags are accessible on both sides of the saddle structure.

During a proportioning operation, workers will fill an appropriately-marked bag while on the saddle and then tear the bag off. Alternatively, workers will simply tear a bag away from the saddle structure and fill it with the desired portion. If the clear bag is used, that is, the bag that

features blanks where the day is in Figs. 1 and 2, the day by which the food should be used may be marked in any desirable fashion.

It will be understood that various changes and additions may be made in the subject matter of the invention without departing from the spirit of the invention particularly as defined in the following claims.